

# LANL Construction Corridor

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**June 16, 2010**

LA-UR 10-04021



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Operated by Los Alamos National Security, LLC for the U.S. Department of Energy's NNSA



# Construction Forum Objectives

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- **Share LANL planning process for construction projects along the Pajarito Corridor for the next ten years**
- **Share constraints which can change LANL's planning**
  - Federal budget process
- **Share LANL's approach to the management of the construction projects**

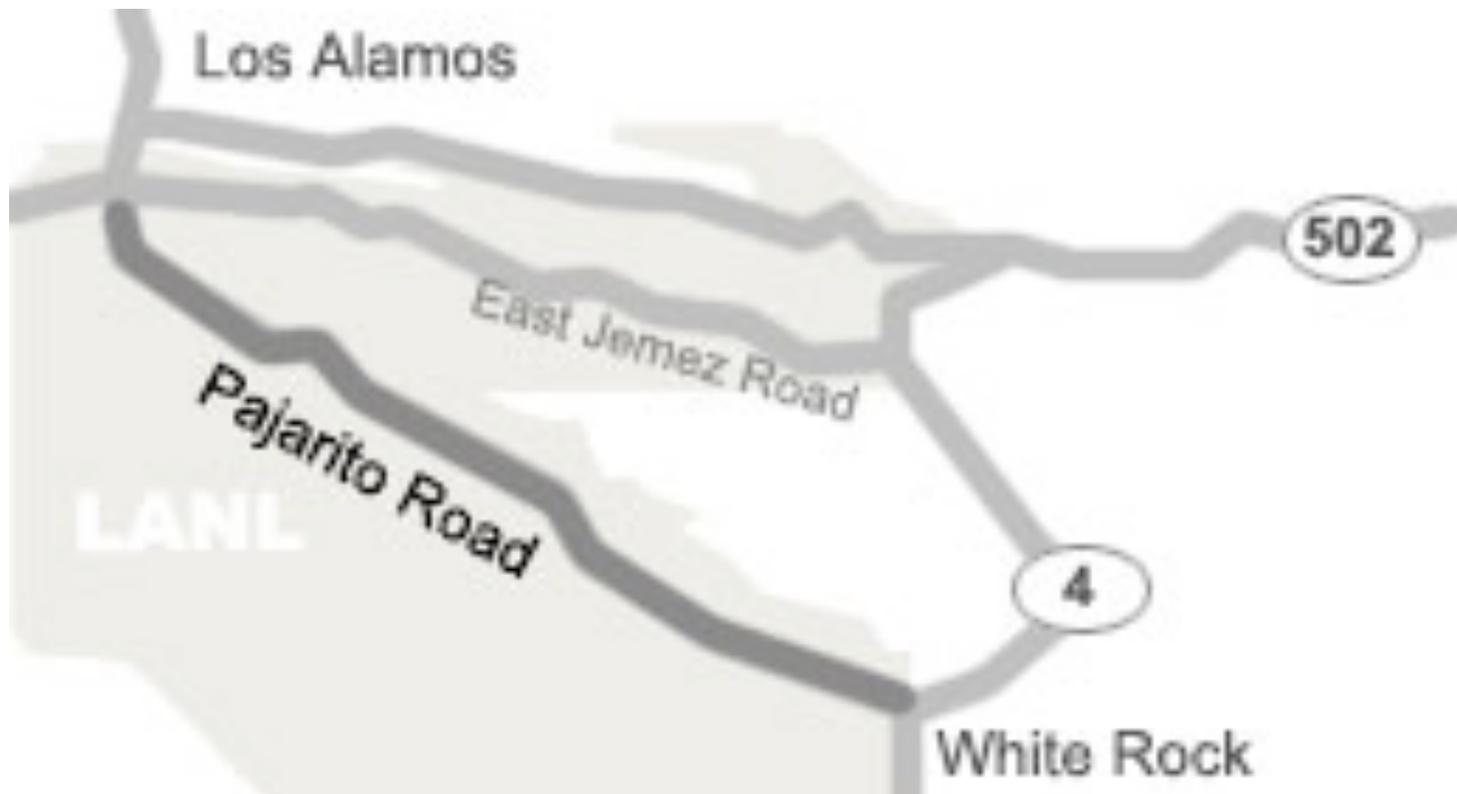
# Major Projects-Near Concurrent Activities

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- **Chemistry & Metallurgy Research Replacement (CMRR)**
- **Nuclear Materials Safeguards and Security Upgrade Project (NMSSUP) Phase II**
- **TA-55 Revitalization Project (TRP) Phase II & III**
- **Radioactive Liquid Waste Treatment Facility (RLWTF)**
- **TRU Waste Facility (TRU)**
- **Material Disposal Area-C Closure**
- **Material Disposal Area-G Closure**
- **Waste Disposition Project**
- **RLUOB Occupancy**

# Construction Project Layout

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# Chemistry & Metallurgy Research Replacement-Nuclear Facility

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- Chemistry and Metallurgy Research laboratory replacement
- Nuclear “Hazard Category 2” facility
- 22,500 square feet of lab space



- Special Nuclear Material storage
- Special facility equipment
- Robust “Security Category 1”

# Chemistry & Metallurgy Research Replacement Radiological Lab/Utility/Office Building

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- Facility performance baseline (\$164M TPC)
- 19,500 square feet of radiological lab space
- Centralized utilities, services for all CMRR facility elements
- Office space for 350 CMRR workers
- Consolidated training facility
- Facility incident command, emergency response capabilities
- RLUOB equipment and installation (\$199M TPC)

# Radiological Lab/Utility/Office Building (RLUOB)

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# Chemistry & Metallurgy Research Replacement Nuclear Facility Construction Strategy

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- **Significant effort (design and construction) performed by subcontractors**
- **LANL CMRR Team integrator/manager of all activities**
- **Design deliverables include all products necessary to construct**
- **35 separate construction packages planned for award**
- **Superior performance to be acknowledged and incentivized through entire construction period**

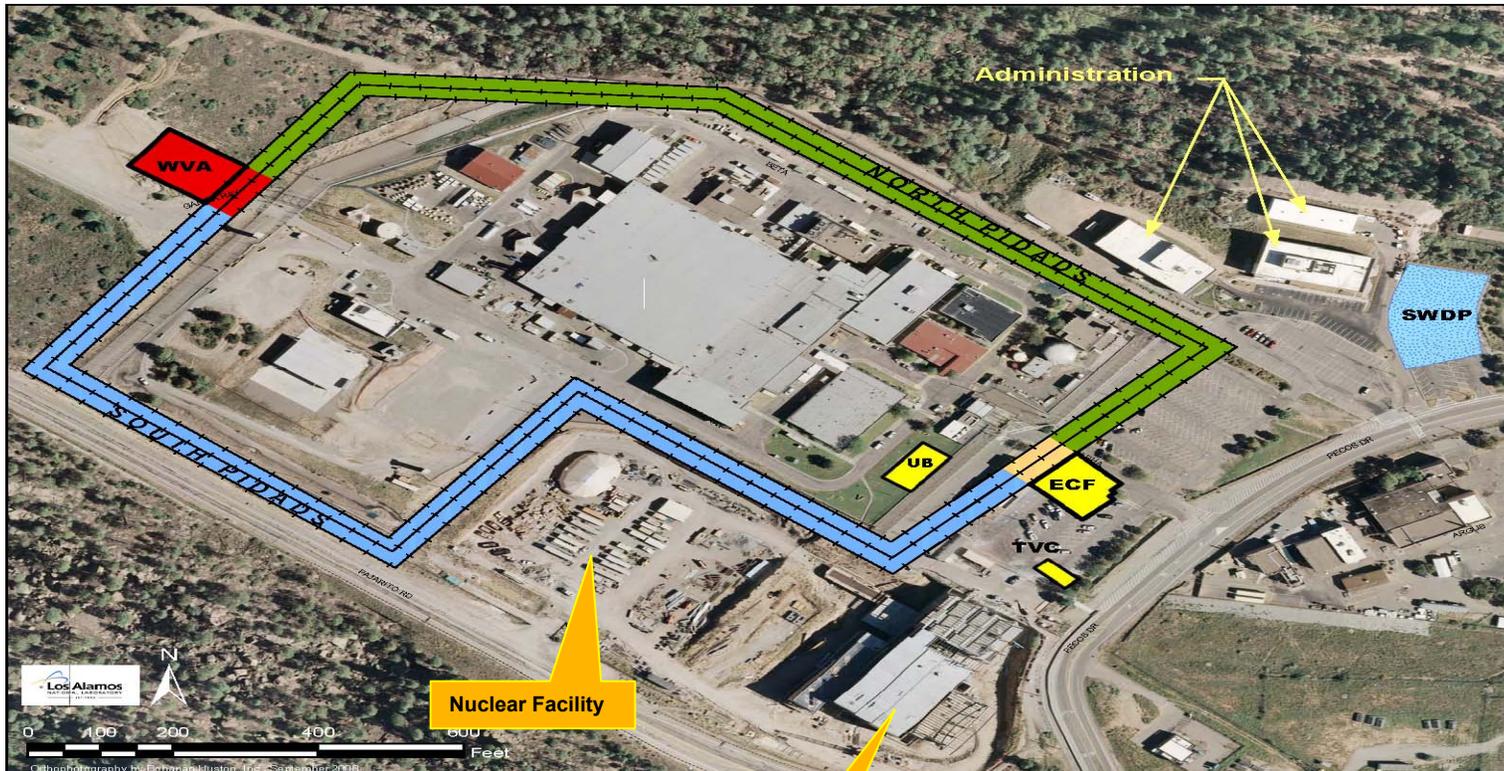
# Construction Bulk Commodity Summary

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The construction of the NF Facility will include the following major commodities, approximately:

122,000	cubic yards of structural concrete
127,000	cubic yards CLSM fill material for soils stabilization
98,000	cubic yards of high-pressure injected grout for soils stabilization
123,000	linear feet of piping > 1/2"
95,000	linear feet of process and instrument tubing < 1/2"
1,040,000	linear feet of conduit and raceway
2,610,000	linear feet of wire, cable and fiber
1,580,000	pounds of ductwork
975,000	pounds of duct support steel

# Nuclear Materials Safeguards and Security Upgrade



RLUOB

# Radioactive Liquid Waste Treatment Facility

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# TRU Waste Facility

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# TA-54 Material Disposal Areas



# Cultural Resources

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- **LANL's commitment to protect cultural resources**
  - LANL has a commitment to protect and preserve cultural resources. The Laboratory has been extensively surveyed and areas of cultural significance have been identified
- **Cultural resources identified to date in CMRR project area**
  - Native American ancestral areas – identified sites in approved areas for project use to date will be avoided. The State Historic Preservation Officer (SHPO) has concurred with a “no effect through avoidance” determination
  - McDougall Homestead – early 1900s era structures and artifacts – mitigated with concurrence with the SHPO

# Environmental Stewardship

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- **LANL takes its environmental stewardship seriously, and numerous programs are in place to protect the environment**
- **Environmental requirements included as part of subcontracting process**
- **Environmental Programs construction activities support closure of contaminated areas in compliance with the RCRA Consent Order with the State of New Mexico**
- **Existing construction programs have been recognized for their excellence in environmentally conscious design**
  - 2010 NNSA Best-in Class: Sustainable Design/Green Buildings-RLUOB
  - 2010 DOE EStar: Sustainable Design/Green Buildings-RLUOB
- **Nuclear Facility will be Leadership in Energy and Environmental Design (LEED) certified**